

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/573,500  
Source: IFWP  
Date Processed by STIC: 4/7/06

# ***ENTERED***

## CRF Errors Edited by the STIC Systems Branch

Serial Number: 10/573,500

CRF Edit Date: 4/7/06  
Edited by: mw

\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

\_\_\_\_\_

\_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

\_\_\_\_\_

/ Deleted: / invalid beginning/end-of-file text ; \_\_\_ page numbers

\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_\_\_

\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_\_\_

\_\_\_ Other:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



IFWP

## RAW SEQUENCE LISTING

DATE: 04/07/2006

PATENT APPLICATION: US/10/573,500

TIME: 12:43:06

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04072006\J573500.raw

3 <110> APPLICANT: Bayer AG, BHC  
 5 <120> TITLE OF INVENTION: New acylglycerol acyltransferase-like protein MGAT-X1 and  
 uses thereof

7 &lt;130&gt; FILE REFERENCE: Le A 36 894

C--&gt; 9 &lt;140&gt; CURRENT APPLICATION NUMBER: US/10/573,500

C--&gt; 9 &lt;141&gt; CURRENT FILING DATE: 2006-03-27

9 &lt;160&gt; NUMBER OF SEQ ID NOS: 5

11 &lt;170&gt; SOFTWARE: PatentIn version 3.1

13 &lt;210&gt; SEQ ID NO: 1

14 &lt;211&gt; LENGTH: 1131

15 &lt;212&gt; TYPE: DNA

16 &lt;213&gt; ORGANISM: Homo sapiens

18 &lt;400&gt; SEQUENCE: 1

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19 actgttctga gatctttgcc tccctcaggc tcccgagaat catggctcat tccaagcagc      60
20 ctagtcactt ccagagtctg atgcttctgc agtggccttt gagctacctt gccatctttt      120
21 ggatcttgca gccattgttc gtctacctgc tgtttacatc cttgtggccg ctaccagtgc      180
22 ttacttttgc ctggttggtc ctggactgga agacccaga gcgagggtggc aggcgttcgg      240
23 cctgggtaag gaactgggtg gtctggacct acatcaggga ctatttcccc attacgatcc      300
24 tgaagacaaa ggacctatca cctgagcaca actacctcat ggggggttcac ccccatggcc      360
25 tccctgacctt tggcgccctc tgcaacttct gcaactgaggc cacaggcttc tcgaagacct      420
26 tcccaggcat cactcctcac ttggccacgc tgtcctggtt cttcaagatc ccctttgtta      480
27 gggagtacct catggccaaa ggtgtgtgct ctgtgagcca gccagccatc aactatctgc      540
28 tgagccatgg cactggcaac ctctgtggca ttgtagtggg aggtgtgggt gaggccctgc      600
29 aaagtgtgcc caacaccacc accctcatcc tccagaagcg caaggggttc gtgcgcacag      660
30 ccctccagca tggggctcat ctggtcccca ccttcacttt tggggaaact gaggtgtatg      720
31 atcaggtgct gttccataag gatagcagga tgtacaagtt ccagagctgc ttccgccgta      780
32 tcttttggtt ctactgttgt gtcttctatg gacaaagctt ctgtcaaggc tccactgggc      840
33 tccctgccata ctccaggcct attgtcactg tgggtgggga gcctctgcca ctgccccaaa      900
34 ttgaaaagcc aagccaggag atggtggaca aataccatgc actttatatg gatgctctgc      960
35 acaaactggt cgaccagcat aagaccact atggctgctc agagacccaa aagctgtttt     1020
36 tccctgtgaat gaaggtactg catgcccagg agcacaggag tgccctgcctt gaagaagaga     1080
37 ctcatctgcc actaaccaaa gacaggcagg agatgaggga ggttatatgt g              1131

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40 &lt;210&gt; SEQ ID NO: 2

41 &lt;211&gt; LENGTH: 328

42 &lt;212&gt; TYPE: PRT

43 &lt;213&gt; ORGANISM: Homo sapiens

45 &lt;400&gt; SEQUENCE: 2

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46 Met Ala His Ser Lys Gln Pro Ser His Phe Gln Ser Leu Met Leu Leu
47 1              5              10              15
48 Gln Trp Pro Leu Ser Tyr Leu Ala Ile Phe Trp Ile Leu Gln Pro Leu
49              20              25              30
50 Phe Val Tyr Leu Leu Phe Thr Ser Leu Trp Pro Leu Pro Val Leu Tyr
51              35              40              45
52 Phe Ala Trp Leu Phe Leu Asp Trp Lys Thr Pro Glu Arg Gly Gly Arg

```

## RAW SEQUENCE LISTING

DATE: 04/07/2006

PATENT APPLICATION: US/10/573,500

TIME: 12:43:06

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04072006\J573500.raw

```

53      50      55      60
54 Arg Ser Ala Trp Val Arg Asn Trp Cys Val Trp Thr His Ile Arg Asp
55 65      70      75      80
56 Tyr Phe Pro Ile Thr Ile Leu Lys Thr Lys Asp Leu Ser Pro Glu His
57      85      90      95
58 Asn Tyr Leu Met Gly Val His Pro His Gly Leu Leu Thr Phe Gly Ala
59      100      105      110
60 Phe Cys Asn Phe Cys Thr Glu Ala Thr Gly Phe Ser Lys Thr Phe Pro
61      115      120      125
62 Gly Ile Thr Pro His Leu Ala Thr Leu Ser Trp Phe Phe Lys Ile Pro
63      130      135      140
64 Phe Val Arg Glu Tyr Leu Met Ala Lys Gly Val Cys Ser Val Ser Gln
65 145      150      155      160
66 Pro Ala Ile Asn Tyr Leu Leu Ser His Gly Thr Gly Asn Leu Val Gly
67      165      170      175
68 Ile Val Val Gly Gly Val Gly Glu Ala Leu Gln Ser Val Pro Asn Thr
69      180      185      190
70 Thr Thr Leu Ile Leu Gln Lys Arg Lys Gly Phe Val Arg Thr Ala Leu
71      195      200      205
72 Gln His Gly Ala His Leu Val Pro Thr Phe Thr Phe Gly Glu Thr Glu
73      210      215      220
74 Val Tyr Asp Gln Val Leu Phe His Lys Asp Ser Arg Met Tyr Lys Phe
75 225      230      235      240
76 Gln Ser Cys Phe Arg Arg Ile Phe Gly Phe Tyr Cys Cys Val Phe Tyr
77      245      250      255
78 Gly Gln Ser Phe Cys Gln Gly Ser Thr Gly Leu Leu Pro Tyr Ser Arg
79      260      265      270
80 Pro Ile Val Thr Val Val Gly Glu Pro Leu Pro Leu Pro Gln Ile Glu
81      275      280      285
82 Lys Pro Ser Gln Glu Met Val Asp Lys Tyr His Ala Leu Tyr Met Asp
83      290      295      300
84 Ala Leu His Lys Leu Phe Asp Gln His Lys Thr His Tyr Gly Cys Ser
85 305      310      315      320
86 Glu Thr Gln Lys Leu Phe Phe Leu
87      325

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89 &lt;210&gt; SEQ ID NO: 3

90 &lt;211&gt; LENGTH: 20

91 &lt;212&gt; TYPE: DNA

92 &lt;213&gt; ORGANISM: artificial sequence

94 &lt;220&gt; FEATURE:

95 &lt;223&gt; OTHER INFORMATION: forward primer

97 &lt;400&gt; SEQUENCE: 3

98 ccaggcctat tgtcactgtg

20

100 &lt;210&gt; SEQ ID NO: 4

101 &lt;211&gt; LENGTH: 20

102 &lt;212&gt; TYPE: DNA

103 &lt;213&gt; ORGANISM: artificial sequence

105 &lt;220&gt; FEATURE:

106 &lt;223&gt; OTHER INFORMATION: reverse primer

## RAW SEQUENCE LISTING

DATE: 04/07/2006

PATENT APPLICATION: US/10/573,500

TIME: 12:43:06

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\04072006\J573500.raw

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108 <400> SEQUENCE: 4
109 ctggcttggc ttttcaattt 20
111 <210> SEQ ID NO: 5
112 <211> LENGTH: 21
113 <212> TYPE: DNA
114 <213> ORGANISM: artificial sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: probe
119 <400> SEQUENCE: 5
120 ttggggagcc tctgccactg c 21
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**VERIFICATION SUMMARY**

PATENT APPLICATION: **US/10/573,500**

DATE: 04/07/2006

TIME: 12:43:07

Input Set : **A:\PTO.AMC.txt**

Output Set: **N:\CRF4\04072006\J573500.raw**

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date

**Raw Sequence Listing before editing  
(for reference only)**



IFWP

## RAW SEQUENCE LISTING

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,500

TIME: 10:43:41

Input Set : A:\SQL 36894.txt

Output Set: N:\CRF4\04062006\J573500.raw

3 <110> APPLICANT: Bayer AG, BHC  
 5 <120> TITLE OF INVENTION: New acylglycerol acyltransferase-like protein MGAT-X1 and  
 uses thereof

7 <130> FILE REFERENCE: Le A 36 894  
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/573,500  
 C--> 9 <141> CURRENT FILING DATE: 2006-03-27

9 <160> NUMBER OF SEQ ID NOS: 5  
 11 <170> SOFTWARE: PatentIn version 3.1

13 &lt;210&gt; SEQ ID NO: 1

14 &lt;211&gt; LENGTH: 1131

15 &lt;212&gt; TYPE: DNA

16 &lt;213&gt; ORGANISM: Homo sapiens

18 &lt;400&gt; SEQUENCE: 1

19 actgtttctga gatcttttggc tccctcaggc tcccagagaat catggctcat tccaagcagc 60  
 20 ctagtcactt ccagagtctg atgcttctgc agtggccttt gagctacctt gccatctttt 120  
 21 ggatcttgca gccattgttc gtctacctgc tgtttacatc cttgtggccg ctaccagtgc 180  
 22 ttacttttgc ctggttggtc ctggactgga agaccccgaga gcgagggtggc aggcgttcgg 240  
 23 cctgggtaag gaactgggtg gtctggaccc acatcaggga ctatttcccc attacgatcc 300  
 24 tgaagacaaa ggacctatca cctgagcaca actacctcat ggggggttcac ccccatggcc 360  
 25 tcttgacctt tggegccttc tgcaacttct gcaactgagc cacaggcttc tcgaagacct 420  
 26 tcccaggcat cactcctcac ttggccacgc tgtcctggtt cttcaagatc ccctttgtta 480  
 27 gggagtacct catggccaaa ggtgtgtgct ctgtgagcca gccagccatc aactatctgc 540  
 28 tgagccatgg cactggcaac ctctgtggga ttgtagtggg aggtgtgggt gaggcctgc 600  
 29 aaagtgtgcc caacaccacc acctcatcc tccagaagcg caaggggttc gtgcgcacag 660  
 30 cctccagca tggggctcat ctgggtcccca ccttcaactt tggggaaact gaggtgtatg 720  
 31 atcaggtgct gttccataag gatagcagga tgtacaagtt ccagagctgc ttccgccgta 780  
 32 tctttggttt ctactgttgt gtcttctatg gacaaaagct ctgtcaaggc tccactgggc 840  
 33 tcttgccata ctccaggcct attgtcactg tggttgggga gcctctgcca ctgccccaaa 900  
 34 ttgaaaagcc aagccaggag atggtggaca aataccatgc actttatatg gatgctctgc 960  
 35 acaactgtt cgaccagcat aagaccact atggctgctc agagacccaa aagctgtttt 1020  
 36 tctgtgaat gaaggtactg catgcccagg agcacaggag tgctgcctt gaagaagaga 1080  
 37 ctcatctgcc actaaccaaa gacaggcagg agatgaggga gggtatatgt g 1131

40 &lt;210&gt; SEQ ID NO: 2

41 &lt;211&gt; LENGTH: 328

42 &lt;212&gt; TYPE: PRT

43 &lt;213&gt; ORGANISM: Homo sapiens

45 &lt;400&gt; SEQUENCE: 2

46 Met Ala His Ser Lys Gln Pro Ser His Phe Gln Ser Leu Met Leu Leu  
 47 1 5 10 15  
 48 Gln Trp Pro Leu Ser Tyr Leu Ala Ile Phe Trp Ile Leu Gln Pro Leu  
 49 20 25 30  
 50 Phe Val Tyr Leu Leu Phe Thr Ser Leu Trp Pro Leu Pro Val Leu Tyr  
 51 35 40 45  
 52 Phe Ala Trp Leu Phe Leu Asp Trp Lys Thr Pro Glu Arg Gly Gly Arg

*P3*  
**Does Not Comply  
 Corrected Diskette Needed**



## RAW SEQUENCE LISTING

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,500

TIME: 10:43:41

Input Set : A:\SQL 36894.txt

Output Set: N:\CRF4\04062006\J573500.raw

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53      50      55      60
54 Arg Ser Ala Trp Val Arg Asn Trp Cys Val Trp Thr His Ile Arg Asp
55 65      70      75      80
56 Tyr Phe Pro Ile Thr Ile Leu Lys Thr Lys Asp Leu Ser Pro Glu His
57      85      90      95
58 Asn Tyr Leu Met Gly Val His Pro His Gly Leu Leu Thr Phe Gly Ala
59      100      105      110
60 Phe Cys Asn Phe Cys Thr Glu Ala Thr Gly Phe Ser Lys Thr Phe Pro
61      115      120      125
62 Gly Ile Thr Pro His Leu Ala Thr Leu Ser Trp Phe Phe Lys Ile Pro
63      130      135      140
64 Phe Val Arg Glu Tyr Leu Met Ala Lys Gly Val Cys Ser Val Ser Gln
65 145      150      155      160
66 Pro Ala Ile Asn Tyr Leu Leu Ser His Gly Thr Gly Asn Leu Val Gly
67      165      170      175
68 Ile Val Val Gly Gly Val Gly Glu Ala Leu Gln Ser Val Pro Asn Thr
69      180      185      190
70 Thr Thr Leu Ile Leu Gln Lys Arg Lys Gly Phe Val Arg Thr Ala Leu
71      195      200      205
72 Gln His Gly Ala His Leu Val Pro Thr Phe Thr Phe Gly Glu Thr Glu
73      210      215      220
74 Val Tyr Asp Gln Val Leu Phe His Lys Asp Ser Arg Met Tyr Lys Phe
75 225      230      235      240
76 Gln Ser Cys Phe Arg Arg Ile Phe Gly Phe Tyr Cys Cys Val Phe Tyr
77      245      250      255
78 Gly Gln Ser Phe Cys Gln Gly Ser Thr Gly Leu Leu Pro Tyr Ser Arg
79      260      265      270
80 Pro Ile Val Thr Val Val Gly Glu Pro Leu Pro Leu Pro Gln Ile Glu
81      275      280      285
82 Lys Pro Ser Gln Glu Met Val Asp Lys Tyr His Ala Leu Tyr Met Asp
83      290      295      300
84 Ala Leu His Lys Leu Phe Asp Gln His Lys Thr His Tyr Gly Cys Ser
85 305      310      315      320
86 Glu Thr Gln Lys Leu Phe Phe Leu
87      325
89 <210> SEQ ID NO: 3
90 <211> LENGTH: 20
91 <212> TYPE: DNA
92 <213> ORGANISM: artificial sequence
94 <220> FEATURE:
95 <223> OTHER INFORMATION: forward primer
97 <400> SEQUENCE: 3
98 ccaggcctat tgtcactgtg
100 <210> SEQ ID NO: 4
101 <211> LENGTH: 20
102 <212> TYPE: DNA
103 <213> ORGANISM: artificial sequence
105 <220> FEATURE:
106 <223> OTHER INFORMATION: reverse primer

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20

## RAW SEQUENCE LISTING

DATE: 04/06/2006

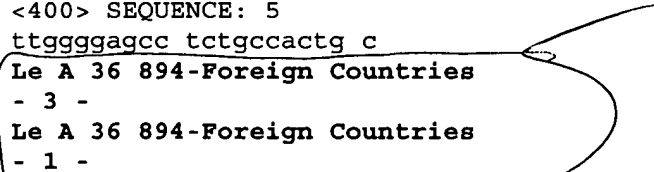
PATENT APPLICATION: US/10/573,500

TIME: 10:43:41

Input Set : A:\SQL 36894.txt

Output Set: N:\CRF4\04062006\J573500.raw

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108 <400> SEQUENCE: 4
109 ctggcttggc ttttcaattt                20
111 <210> SEQ ID NO: 5
112 <211> LENGTH: 21
113 <212> TYPE: DNA
114 <213> ORGANISM: artificial sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: probe
119 <400> SEQUENCE: 5
120 ttggggagcc tctgccactg c                21
W--> 122 Le A 36 894-Foreign Countries
W--> 125 - 3 -
W--> 129 Le A 36 894-Foreign Countries
W--> 132 - 1 -
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**VERIFICATION SUMMARY**

DATE: 04/06/2006

PATENT APPLICATION: US/10/573,500

TIME: 10:43:42

Input Set : A:\SQL 36894.txt

Output Set: N:\CRF4\04062006\J573500.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No  
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:122 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5  
L:125 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5  
L:129 M:334 W: (2) Invalid Amino Acid in Coding Region, NUMBER OF INVALID KEYS:5  
L:132 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:5